IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	10/521599	Confirmation No. N/A
Applicant	:	Dominik Meyer	
Filed	:	January 18, 2005	
TC/A.U.	:	N/A	
Examiner	:	N/A	
Title	:	USE OF NEUROTOXIC SUBSTANCES FOR THE PRODUCTION OF A MEANS FOR THE TREATMENT OF JOINT PAIN AND METHOD FOR APPLICATION OF SAID MEANS	
Docket No.	:	LUS-15874	
Customer No.	:	040854	

LETTER

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir/Madam:

Enclosed herewith is an English translation of the International Preliminary Examination Report for filing in the above-identified application.

Respectfully submitted,

RANKIN, HILL, PORTER & CLARK LLP

By _____
David E. Spaw, Reg. No. 34732

4080 Erie Street
Willoughby, Ohio 44094-7836
(216) 566-9700

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Mail Stop Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.

_____
Signature of Person Mailing Paper

4/4/05 David E. Spaw
Date Printed Name of Person Mailing Paper

Translation

PCT/CH2002/000400

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 1947/PCT	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/CH2002/000400	International filing date (*day/month/year*) 19 July 2002 (19.07.2002)	Priority date (*day/month/year*)
International Patent Classification (IPC) or national classification and IPC A61K 31/05, 31/165, 31/167, 31/245, 31/445, 33/04, A61P 19/02, A61K 31/445		
Applicant MESTEX AG		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 3 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand	Date of completion of this report
19 January 2004 (19.01.2004)	02 November 2004 (02.11.2004)
Name and mailing address of the IPEA/EP Facsimile No.	Authorized officer Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/CH2002/000400

I. Basis of the report

1. With regard to the **elements** of the international application:*

☐ the international application as originally filed

☒ the description:

pages 1-14, as originally filed

pages _____, filed with the demand

pages _____, filed with the letter of _____

☒ the claims:

pages _____, as originally filed

pages _____, as amended (together with any statement under Article 19

pages _____, filed with the demand

pages 9-34 / 1-8, 35-43, filed with the letter of 8.4.2004 / 8.10.2004

☐ the drawings:

pages _____, as originally filed

pages _____, filed with the demand

pages _____, filed with the letter of _____

☐ the sequence listing part of the description:

pages _____, as originally filed

pages _____, filed with the demand

pages _____, filed with the letter of _____

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.
These elements were available or furnished to this Authority in the following language _____ which is:

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

☐ the language of publication of the international application (under Rule 48.3(b)).

☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages _____

☐ the claims, Nos. _____

☐ the drawings, sheets/fig _____

5. ☒ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* *Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).*

** *Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.*

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/CH2002/000400

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 1-43 (partly)

because:

☒ the said international application, or the said claims Nos. 40-43 (industrial applicability) relate to the following subject matter which does not require an international preliminary examination *(specify)*:

See supplemental sheet

☐ the description, claims or drawings *(indicate particular elements below)* or said claims Nos. _____ are so unclear that no meaningful opinion could be formed *(specify)*:

☐ the claims, or said claims Nos. _____ are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for said claims Nos. 1-43 (partly).

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☐ the computer readable form has not been furnished or does not comply with the standard.

I. Basis of the report

1. This report has been drawn on the basis of *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.)*:

The amendments submitted with the letter of 8 October 2004 introduce substantive matter that, contrary to PCT Article 34(2)(b), goes beyond the disclosure in the international application as filed. The amendments are as follows:

Claim 4: "...local anesthetic in a concentration of over 4%...".

This also applies to claims 5-39 in conjunction with claim 4.

Supplemental Box
(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: III.

1. An incomplete search report was established for claims 1-43 (see comment in the international search report, field I.2). The international preliminary examination thus applies only to those parts of claims 1-43 for which an international search report has been established (PCT Rule 66.1(e)).

2. Claims 40-43 relate to subject matter which, in the opinion of this Authority, falls under PCT Rule 67.1(iv). Consequently, no expert opinion has been established in respect of the industrial applicability of the subject matter of said claims (PCT Article 34(4)(a)(i)).

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims		YES
	Claims	1-43	NO
Inventive step (IS)	Claims		YES
	Claims	1-43	NO
Industrial applicability (IA)	Claims	1-39	YES
	Claims		NO

2. Citations and explanations

1. Reference is made to the following international search report citations:

D1: WO 99/01114 A (EURO CELTIQUE SA; DONIGI GALE DONNA (US); CHASIN MARK (US); GOLDEN) 14 January 1999 (1999-01-14)

D2: WO 00/61152 A (BRANDSSON SVEINBJOERN; HEDNER THOMAS (SE); HEL AB (SE); KARLSSON J) 19 October 2000 (2000-10-19)

D3: WO 01/02015 A (UNIV GEORGIA RES FOUNDATION, INC) 11 January 2001 (2001-01-11)

D4: US-A-3 368 937 (MACEK THOMAS J ET AL) 13 February 1968 (1968-02-13)

D5: US-A-4 851 442 (WATSON W KEITH R) 25 July 1989 (1989-07-25)

D6: CALVILLO O ET AL: "NEUROAUGMENTATION IN THE MANAGEMENT OF SACROILIAC JOINT PAIN. REPORT OF TWO CASES" SPINE, PHILADELPHIA, PA, US, Vol. 23, No. 9, 1 May 1998 (1998-05-01), pages 1069-1072, XP001013345

D7: DATABASE EMBASE [Online] ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL; ULSETH E.: "Nerve blocks for chronic pain." XP002232748, located in the STN Database, accession no. 79200943

D8: US-A-4 657 764 (ARIAS-ALVAREZ ANTONIO J) 14 April 1987 (1987-04-14)

D9: DE 195 45 180 A (LIEDTKE PHARMED GMBH) 5 June 1997 (1997-06-05)

a) Document D1 describes the treatment of localized joint pain with a composition containing a local anesthetic such as lidocaine, bupivacaine, tetracaine, ropivacaine or etidocaine, an adjuvant for delayed release and a substance for increasing/prolonging the effect, such as vincristine, cortisone or hydrocortisone. A vasoconstrictor such as epinephrine, norepinephrine or phenylephrine can be added. Moreover, the compositions can contain a diagnostic agent such as a contrast medium for nuclear spin resonance tomography. The compositions can be administered into the joint. The local anesthetic is microencapsulated and is not available in a dissolved form.

b) Document D2 describes a method for treating pain related to joint surgery wherein a morphine-6-glucuronide is administered, preferably with a local anesthetic such as lidocaine, bupivacaine, ropivacaine and possibly an NSAID. A common salt solution or, for example, an aqueous solution containing hyaluronic acid is used as the carrier (see page 5, lines 11-16 and examples 1-3).

c) Document D3 describes topical compositions (salves, cremes, etc.) containing an NSAID, an alcohol such as propylene glycol, a substance for lowering the melting point such as thymol or eugenol and a local anesthetic such as lidocaine, tetracaine or mixtures thereof. The compositions are used to treat inflammations and/or pain related *inter alia* to rheumatoid arthritis, arthralgia, gout, etc. No solutions are mentioned.

d) Document D4 describes injectable aqueous solutions containing dexamethasone, lidocaine, sodium bisulfite, phenol, hydrochloric acid and epinephrine. The solutions are used to treat arthritis and bursitis.

e) Document D5 describes the treatment of pain and/or inflammation associated with arthritis using a solution for localized application, containing lidocaine, DMSO and citric acid.

f) Document D6 describes the treatment of sacroiliac joint pain by means of an intraarticular injection of local anesthetics and steroids as well as intracapsular injections of glycerin, glucose and phenol. Bupivacaine and lidocaine were injected into the joint after the contrast medium iohexol.

g) In document D7, local anesthetics such as 0.5% lidocaine, 0.25% bupivacaine, phenol, chlorocresol and glycerol are used to create a neurological blockade, e.g. a supracapsular blockade for shoulder pain.

h) Document D8 describes the use of bisulfites to treat arthritis symptoms. Local anesthetics are not mentioned.

i) Document D9 describes a topical composition for treating the symptoms of pain associated with rheumatism, arthritis and arthrosis, said composition containing a local anesthetic such as tetracaine, prilocaine, bupivacaine, mepivacaine, etidocaine as well as procaine and benzocaine, said substances occurring in concentration ranges of 0.5 to 40%. No solutions are mentioned.

2. Novelty and Inventive Step (PCT Article 33(2) and (3))

The present application does not satisfy the requirements of PCT Article 33(1).

The use of local anesthetics such as lidocaine or bupivacaine in the form of a solution to treat joint pain was already described in documents D2, D4, D5, D6 and D7. The method for treating pains of this type, wherein a corresponding solution is injected into the intracapsular region or into the synovial bursa is also already known (see *inter alia* D2 and D6).

Therefore, the subject matter of independent claims 1 and 40 is not novel (PCT Article 33(2)).

Dependent claims 2-39 and 41-43 do not appear to contain any additional features that, in combination with the features of claims 1 and 40, respectively, to which they refer back, meet the PCT requirements for novelty and inventive step.

3. Industrial Applicability (PCT Article 33(4))

The PCT Contracting States do not have uniform criteria for assessing the industrial applicability of claims 40-43 in their present form. Patentability may also depend on the wording of the claims. The EPO, for example, does not recognize the industrial applicability of claims to the medical use of a compound; it may, however, allow claims to the first medical application of a known compound or to the use of such a compound in the manufacture of a drug for a new medical application.